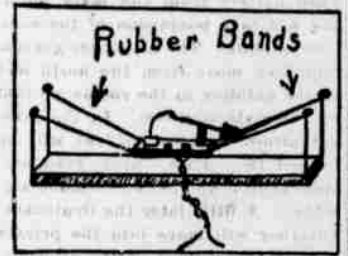


RADIO

CRYSTAL JARRING CAN BE PREVENTED

Simple Shock Absorber That Was Devised by Operator on a Transoceanic Vessel.

One of the worst irritations suffered by the crystal detector operator is the frequent jarring out of good adjustment. Often the slightest vibration caused by a heavy footfall, slamming of a door or someone brushing against the table is sufficient to disturb the good point. The process of the readjustment has to be gone through again. This happens with such regularity that numerous schemes to avoid jarring the detector stand have been devised. Most of these were failures, and the phrase "Don't Jar Out Detector," became a standard joke. There is one scheme which will protect the adjustment from almost anything short of an earthquake.



This idea was first encountered on a shipping board vessel. The vibration on a ship is great, and for this reason galena cannot ordinarily be kept in adjustment, and is rarely used. However, on a vessel in transoceanic service the crystal, unless the very best possible, will not bring in a signal for days at a time when the ship is near mid-ocean, far from any land stations. This operator had rigged up a shock absorber for his galena detector as shown in the figure. Little explanation is necessary. A block of wood a foot square or smaller supports four large nails or wood posts between which are stretched rubber bands as shown. These bands support the detector stand. If the stand is heavy with a small base it will be top heavy; and the stand had better be mounted on a larger base. The rubbers should be only heavy enough to keep the stand from touching the block, so that there is plenty of flexibility to absorb all vibration.

Use a flexible cord for connecting the detector into the circuit so that it can be taken off the shock absorber and adjusted on the table. When a good adjustment is obtained, carefully replace the detector on the shock absorber and it will stay in adjustment almost indefinitely unless of course disturbed by the heavy signals or static.

In the case mentioned the detector would hold an adjustment through an entire watch, though the vibration from the engine was pronounced and in a heavy sea there were strong tremors and jumps. This ship rolled considerably, but although the detector

without the construction of the opposite half of the wave.

The more perfect the rectification the louder the signal will be in the phones, because the resultant audible current is the difference between the two halves of the cycle. The crystal is not a perfect rectifier. It is merely a resistance which does not follow Ohm's law. It offers more resistance to a current flowing in one direction than the other. Suppose the positive half of the current is to be utilized, partially neutralize the positive current, reducing the strength of the signal.

A curve for a galena crystal is shown in curve No. 1, in Fig. 1. The curve will vary for every adjustment on the crystal. This graph represents a very good adjustment. The best signal will be obtained when the sharp bend in the curve is at the working point. In the case of the galena crystal this point would be at zero potential. At this point the rectification will be the highest.

Some crystals require a local battery and potentiometer to bring the working point to the proper point on the curve. Curve No. 2 is for a carbonyl crystal. To work this crystal most effectively the potentiometer would have to be adjusted to give a positive potential of about three volts. The dotted line for No. 3 is for an ordinary and is a straight line.

Longer Life for Your Tubes.

For storage battery economy and longer life of the vacuum tube, it is always best to employ the minimum filament brilliancy consistent with adequate audibility of the signals being received. Nothing is gained by burning the filament above the temperature necessary for maximum regeneration, and white heat is seldom necessary to accomplish this, according to Radio Broadcast.

By resorting to a two-stage amplifier in receiving from distant broadcasting stations, ample audibility can be obtained without excessive filament brilliancy. As a matter of fact, signal strength may well be sacrificed to purity of tone in voice and music, for after all it is faithful reproduction of sound rather than maximum noise which makes radio-telephone reception enjoyable.

Radio School for Army Flyers.

A new army radio school for training air service radio operators and electricians has been established at Chanute Field, Illinois. The school was removed from Post Field, Oklahoma, and new classes for radio instruction are being formed. It will be equipped with all the latest radio devices, including apparatus for aerial work in both heavier and lighter-than-air craft. Enlistments for training in radio for the army air service are now being accepted at Chanute Field.

Vatican Uses Radio to U. S.

The first use of radio by the Vatican was the recent transmission to the United States of a message from Pope XI, through Mgr. F. Morgogni Dada, papal pro-secretary of Extraordinary ecclesiastical affairs, to James A. Flaherty of Philadelphia, supreme knight of the Knights of Columbus. The radio carried the formal approbation of Pope Pius of the Knights of Columbus, million-dollar American welfare campaign in Italy.

Big Chinese Program.

The new radio program in China calls for the construction of four wireless stations. One in Shanghai is to be larger than any now in existence in this country. Completion of this station will mean direct communication between the United States and China.

RADIO FLASHES

A good safety-first slogan for the radio fan might be "Live wire? Dead man!"

A couple married by radio a short time ago already are seeking a divorce, a report says. Sort of a loose coupling.

It is said that information broadcast from South America to manufacturers of motorcars in the United States resulted in large foreign orders.

A Western radio broadcast a talk upon the value of the right atmosphere in home life. The home life, like radio, often has static in its atmosphere.

Members of the regular army, organized reserves and National Guard in San Francisco will have the opportunity to buy some of the 10,000 army receiving sets at \$7.50 each. These sets were declared surplus stock and cost \$1,000,000. Buyers are limited to military men only.

A small piece of hollow brass tubing, such as often used for certain ro's, will make a good shaft for the rotor in a variocoupler. The two connections for the revolving coil are made by wires running through the hollow tube to the center, then through a hole to the windings. This connection will do away with sliding contacts in the variocoupler.

It often is difficult to make dials or knobs held firmly in place on such instruments as variometers, rheostats, etc., because the shafts are too smooth. This may be overcome easily by filing one side of the shaft slightly, making a flat surface. Place the tightening screw over this flat space. Adjust it firmly, and the dials will be held in place.

News Notes From All Parts of UTAH

Logan.—Le Grand Walker of Pleasant Grove, has been awarded the Union Pacific scholarship for Utah county. This scholarship is offered by the Union Pacific railroad company to the boy in each county through which its road passes who excels in agriculture and civic improvement. It provides \$75 with which to defray expenses while attending school at the Utah Agricultural college.

Salt Lake City.—The Dixie Power company was ordered by the public utilities commission to allow the city of St. George a credit of \$1007 on power furnished the city as a special consideration under the agreement entered into at the time the municipal plant was turned over to the company.

Ogden.—Stephen L. Taintor, 35, an ex-convict, in an alleged confession tells of stealing an automobile at Great Falls, Mont., with which he has been transporting liquor from Idaho, and also robbing residences of well-known local citizens of supplies of wines and whiskey.

Nephew.—A curio of modern opera chairs has arrived from the east and several men are now employed assembling and installing same in the new high school auditorium. The carload contained 475 chairs.

Salt Lake City.—Prohibition Enforcement Agents Jerry Z. Hoyt and George Baker, suspended last week pending an investigation of the recent raid at the home of Dr. M. M. Critchlow, were reinstated on the receipt of telegraphic advice from the commissioner of Internal Revenue and General Prohibition Director Haynes.

Ogden.—G. G. Robertson, an employee of the Utah-Idaho Central railroad was held up, bound and robbed by two masked and armed bandits. The robbery took place in the railroad subpass station within 100 yards of the Utah Hot Springs hotel, in Boxelder county. The robbers, according to Robertson's story, took \$10.40 a gold watch and an alarm clock from him.

Richfield.—The Linquist and Warner furniture store was destroyed by fire here. The loss is estimated at \$20,000, with insurance amounting to \$8,000. The fire was caused by a defective heating plant. Fire broke out in the same store a week ago, but did no material damage.

Salt Lake City.—Wasatch county commissioners and the county clerk, meeting with the state road commission, discussed several matters in connection with "cleaning the slate" as between the two commissions. Among other things, the county commissioners indicated that they will sign a contract as between county and state, in which the county will undertake the maintenance of the Heber-Fruitland forest road.

Ogden.—Beet growers in Utah and Idaho were mailed checks aggregating \$310,000 by the Amalgamated Sugar company, according to the announcement made by President Henry H. Rolapp. The money represents an advance payment for the farmers for beets furnished under the profit-sharing contract.

Salt Lake City.—The petition of Charles McKellar, convicted in the first district court, Boxelder county, of voluntary manslaughter, for clemency, was denied by the state board of pardons at its regular meeting.

Ogden.—Mayor Frank Francis, in an address at the First Methodist church made an appeal to citizens to co-operate with the city administration in its efforts to enforce the prohibition law.

Salt Lake City.—Sweeping charges which would virtually abolish the finance end of the state department of finance and purchase are advocated by State Auditor Mark Tuttle in his annual report made to Gov. Charles L. Mabey. The auditor holds the entire law as being in conflict with the constitution and providing duplication of work and effort in the finance end.

Logan.—One dollar bill raised to ten dollars by pasting the numerals 1 in the corners, has made its appearance here and merchants have been warned to look out for it. It cannot be passed unless in a rush business. One was passed in Provo for ten dollars and Sheriff Hockstein at once informed the officers here.

Manti.—The local chick hatchery has completed the construction of a new modern building to meet the rapidly growing demand for chicks. A 20,000 egg incubator will be installed which will double the capacity of this spring's hatch. Ten and a half tons of eggs will be required for the two incubators which have a capacity of 100,000 eggs. A thousand chicks a day will be delivered during the months of March, April, May and June.

Daddy's Evening Fairy Tale

by MARY GRAHAM BONNER

LAUGHING JACKASS

Billie Brownie went a-calling on some of his friends at the zoo.

"Hello, Laughing Jackass," he said to a big bird of the Kingfisher Bird family.

"Hello," said the Laughing Jackass. "You're not laughing," said Billie Brownie.

"No," said the Laughing Jackass. "I've been trying to laugh for some time, but I've heard nothing to laugh at."

"In fact, jokes have been becoming very scarce of late. Very scarce."

"You don't always wait for jokes, do you?" asked Billie Brownie. "Don't you laugh at times just for the sake of laughing?"

"Of course," said the Laughing Jackass. "I laugh in the mornings, for it does seem a joke to wake up and remember that I'm a Laughing Jackass and such a queer bird."

"And I laugh at night, for it seems to me a joke to think that I'm so funny in ways and in looks that people will go out of their way to come and look at me."

"At times I laugh for other reasons, too. Oh yes, it doesn't take so much to make a Laughing Jackass laugh, but at present I'm thinking that it would be nice if there were a few good new jokes going about."

"I speak as though they went about on legs and feet, don't I? Well, that is more or less of a funny thought. Perhaps I'll laugh at that."

"I did hear a funny expression or saying the other day. Someone said that she couldn't make head or tail of a certain thing. And it seems that she meant she couldn't understand this certain thing at all."

"I thought that was rather funny. You see, she felt that when she said she couldn't make head or tail of it she was very clear in showing that she had not been able to understand it. And there is sense to that, too. For the head is at one end of a creature and the tail is at the other end, and if one can't understand anything from one farthest point to the other farthest point, it is a pretty good expression to speak like that."

"Yet people haven't tails, and so I think the expression could be improved by saying:

"I can't make head or feet of a certain thing."

"I would be hard to get the new expression started," said Billie Brownie. "The other one has been used for many, many years."

"Well, I shall have a joke for you when I come to see you again," said



"I Have a Funny Face."

Billie Brownie. "I'm sorry I have none today. But I'm quite out of jokes."

"It just happens that way sometimes. I run completely out of jokes."

"I think it must be that way with lots of people. They can't think up a joke some days. It just seems as though their whole supply had been used up and as though the joker-larder were as empty as empty could be."

"It would be so nice if one could just have a joke ready for any time a good suitable joke, I mean."

"But then I suppose there would be no fun in a joke if it wasn't a little unusual and a little of a surprise."

"If one found jokes everywhere one looked and everywhere one listened, it wouldn't make a joke so nice a thing, I'm sure."

"Yes, there's old Tortoise up the line. He's such a heavy creature that he can never bother about anything as light and airy as a joke."

"He wouldn't laugh at the funniest joke possible, I'm quite sure he wouldn't," the Laughing Jackass continued.

"Then there is old Mr. Gnu from Africa. He has funny crooked horns and a funny looking face, and at one time he was called a horned horse."

"Or rather members of his family were called that."

"But he is cross and he has a bad temper."

"He wouldn't laugh at a joke."

"Old Wart-Hog wouldn't laugh at a joke either. Well, one can't blame him for being dismal. He has such a hideous face. Now I have a funny face and so when jokes have not been around for some time my funny face will always amuse me."

"There's Kinkajou from South America, a dear little creature of the racoon family, though he has a long tail like a monkey. He is a great fruit eater and he is as jolly as can be. Yes he can laugh at a joke. But no one has the joke-sounding name that I have, for the Laughing Jackass am I."



This is your corner. Make use of it for your information on questions that are puzzling you. It will be my pleasure and privilege to answer carefully and promptly all questions submitted to me. Your questions must be limited to two, and your full name and address must accompany each letter. For special information send stamped envelope. All communications will always be held in absolute confidence.

All letters should be addressed very plainly in pen and ink to Helen Brooks, Box 1545, Salt Lake City.

Dear Miss Brooks:

Will you please answer two questions for me. (1) Will you tell me all you can about the name "Roma," what it means, origin, etc. (2) What do the words "Sic fractus fortis" mean? Thanking you in advance, I remain, FENELPHE, Utah.

I have been unable with the material at hand to find even the meaning of the name "Roma." If I find it later, however, I will tell you about it. "Sic fractus fortis" is a Latin phrase meaning, "Thus perished the strong," or "Thus the strength of the greatest is broken."

Dear Miss Brooks:

I have been very interested in "Just Between You and Me," and have learned many things. My friends and I have some puzzling questions we will be very thankful if you would answer. We are sending them all together so please excuse the number. (1) What will remove ink stains from tan silk pongee? (2) Is it proper for a girl to speak a greeting first on passing a boy friend on the street or elsewhere? I am sending my name so you may send it to Bob and Bill. Wishing you lots of success, I am GOLDEN LOCKS, Utah.

(1) Is it proper for a girl to say, thank you, at the close of a dance? (2) Can you advise a good method for waving or curling hair that will not harm the hair and that will save as much time as possible. Please send my name to Bob and Bill.

THINEY, Utah.

(1) Is it, for if not why isn't it proper to pick up a fork if you drop it at the table? (2) I am 14 years old. I have blue eyes, light long hair, I am slender and tall. Can you please tell me a fashion that I may dress my hair so it will become me and also be in style. I have a round face. Wishing you lots of success, I am BLUE EYES, Utah.

I hope we haven't taken too much of your time and space. Do you answer personal letters that you don't put in the paper?

THREE FRIENDS.

Welcome girls. (1) I think you will find that the following will remove the ink without injuring the goods—wet with clear water then cover the spot with powdered salts of lemon, and let it remain a few minutes. Wash in clear water. (2) Yes, the girl should speak first.

(1) No, the young man should thank you. You may then tell him you also enjoyed the dance. (2) The fabric covered curlers are the best and least harmful. Of course it takes the same amount of time.

(1) If you are in a restaurant or cafe, the waiters will pick up the fork and hand you a clean one. If you are in a private home, where there are no servants, it is perfectly proper for you or the gentleman next to you to pick the fork up, and you hostess will hand you a clean one. Wave your hair softly and comb straight back from the face, letting it come well in front of the ears but do not puff it out. Fasten it low in the back and divide into two parts, cross these and form each into a twist across the head from ear to ear. Curl the ends and let them come from under the coil and to the left side.

Yes indeed girls I answer many more letters personally, than appear here each week.

Dear Miss Brooks:

I am a girl of fourteen. I weigh about 100 lbs. and am 5 feet tall. I have light brown hair and blue eyes. Will you please suggest how shall I do my hair and what colors should I wear? Thanking you in advance, I remain PRUDENCE, Idaho.

You should wear bright blues, rose shades, light browns, black and violet shades nicely. Prudence, and I can suggest no prettier style than to arrange the hair softly around the face, braid a few inches from the head and fasten with a ribbon leaving the curls end free. If your face is more long than round put it out across top and back of head and fasten lightly close to the head, instead of braiding, and still leave the curled ends free.

Dear Miss Brooks:

I have enjoyed your corner for some time and would like you to answer some questions for me. (1) Is it proper for a boy to hold a girl's arm while walking on the street? (2) Is it proper for a boy and girl to go to church together? (3) Upon being introduced to a boy's mother what should you do and say? Is it proper to shake hands with older persons whom you are introduced to? Hoping I am not too much bother, I remain, AN ARDENT ADMIRER, Idaho.

(1) It is never proper for a man to take a lady's arm. The lady takes the man's arm, when on the street at night. (2) Yes, quite proper. (3) A perfectly proper and formal way for a lady to receive an introduction is to bow slightly, smile pleasantly and repeat the name of the person introduced. If you wish to be less formal it is perfectly proper to offer your hand, though the older lady usually offers her's first.

Dear Miss Brooks:

I am very interested in your cozy corner "Just Between You and Me." I hope you will answer my questions. They are: (1) I was born Aug. 29th. What is my lucky number, day and month? (2) Could you please send me the address of Gloria Swanson, Mary Pickford, Rudolph Valentino and Richard Barthelmess? (3) I am fourteen years of age. Is it proper for me to write to boy friends in the town where I was raised? I thank you for this advice in advance. I am, AN INQUISITIVE GIRL, St. George, Ut.

(1) For one who was born in December, the golden red is the flower, colors gold, red and green, Thursday is the day and February and June the months. (2) Gloria Swanson and Rudolph Valentino may be addressed at the Lasky Studios, Vine St. Hollywood, Calif. Richard Barthelmess is in care of Inspiration Pictures, 565 Fifth Ave. New York City, and Mary Pickford at the Pickford-Fairbanks Studios, Hollywood, Calif. (3) If the boys are old friends of the family it would be quite proper for you to write them.

Dear Miss Brooks:

This is my first attempt to enter the Corner, and I hope I will be welcomed. My questions are these: (1) I was born on December 24, 1909. What is my lucky day, color, flower and month? (2) Which do you think the best for a girl to enter—teaching or stenography? I have some inclination for teaching, but stenography seems so much easier. (3) I have a rather bad disposition. How can I improve it? Little things irritate me so. I have a rather quick temper and am very stubborn. I try to be pleasant sometimes but it doesn't seem to help any. Wishing success to you and your Corner. Yours sincerely, BOOKWORM, Idaho.

You are welcome. (1) For the born in December Thursday is said to be their lucky day; February and June the months; flower, goldenrod; colors, gold, red and green. (2) This depends so much upon the position you are the better fitted for. If you are desirous of your case of disposition correctly, it would seem that if there is one position which requires more patience and sweetness to fill successfully, than another, it surely is that of teaching. Serving the public in any capacity requires amiability, patience, and a desire to please, to be at all successful. The world is full of little surly, impatient, unwilling to please persons; and they always have difficulty in obtaining a position and still more difficulty in retaining it. Now while you are young and habits and disposition may be moulded into the beautiful and lovable, is the time to build a character which will be a blessing to yourself and very one you come in contact with. Time, place, or environment will not overcome traits of character such as you describe, without the desire and effort on your part; so when I next hear from you I am sure you will have made the necessary effort and are winning. (See answer to Doris.) I wish you a bright and happy New Year.

Goodnight (Texas) Idaho:

Thanks for your kind words and also your offer. Send me your name, Texas Goodnight, and we will see what we can do.

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